	Uteah
Name :	
Roll No.:	A Date of Executing and Explana
Inviailator's Sianature :	

CS/M.Tech (CSE)/SEM-2/CST-1202-C2/2010 2010 MULTIMEDIA TECHNOLOGY

Time Allotted: 3 Hours Full Marks: 70

The figures in the margin indicate full marks.

Candidates are required to give their answers in their own words as far as practicable.

GROUP - A

(Multiple Choice Type Questions)

- 1. Choose the correct alternatives for any ten of the following: $10 \times 1 = 10$
 - i) With reference to multimedia elements, of the following, pick the "odd-one" out : graphics, animation, audio, video and voice script
 - a) voice script
- b) video script
- c) audio script
- d) all of these.
- ii) What is another name for 2D animation?
 - a) Cell animation
- b) Video animation
- c) Animation
- d) None of these.
- iii) Which of the following two file formats has a smaller file size: WAV or MP3?
 - a) MP3

- b) WAV
- c) Both of these
- d) None of these.

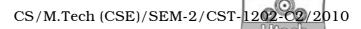
30011 (M.Tech)

[Turn over

CS/M.Tech (CSE)/SEM-2/CST-1202-C2/2010

	MP4, AVI, JPG and MOV?			(100)		
	a)	MP4	b)	AVI		
	c)	MOV	d)	JPG.		
v)	In a multimedia project, a storyboard details the graphics, audio, video, animation, interactivity, other that should be used in each screen of the project.					
	a)	True				
	b)	False.				
vi)	DAT	is an acronym for				
	a)	Digital Audio Tape	b)	Data Audio Tape		
	c)	Disk Audio Tape	d)	None of these.		
vii)	A broadcast/NTSC video requires how many FPS to play smoothly?					
	a)	30	b)	25		
	c)	15	d)	45.		
viii)	Using Illustrator or CorelDraw you can create mai what type of graphics ?					
	a)	Raster	b)	Gabor		
	c)	Vector	d)	None of these.		
ix)		ereates the in-between				
	a)	Tweening	b)	Motion		
	c)	Shaping	d)	None of these.		
30011 (M	.Tech	n) 2				

iv) Which of the following is not a video file extension:



- x) Which HTML tag you've to use to insert a Flash Movie in a web page?
 - a) Embedded
- b) Hyperlink
- c) Shaping
- d) None of these.
- xi) A most basic skill a person requires to pursue an animation career is skills.
 - a) drawing
- b) masking

- c) tuning
- d) none of these.

GROUP - B

(Short Answer Type Questions)

Answer any *three* of the following.

 $3 \times 5 = 15$

- 2. What are the components of multimedia? Describe the components along with block diagram.
- 3. Discuss RLE with proper example.
- 4. What is Global Histogram based approach in multimedia database? Give the expression.
- 5. Give a comparative study between JPEG & BMP format?
- 6. How could you define codec ? Where is it used ? What is the different of speech codec & video codec ?
- 7. What do you mean by I-frame, P-frame and B-frame? What for these are used?
- 8. Write down the working principle of Sound card with block diagram.

30011 (M.Tech)

3

[Turn over

GROUP - C

(Long Answer Type Questions)

Answer any three of the following.



- A movie having 3·5 hrs. of time duration in NTSC system.
 Calculate the total no. of frames. How digital to analog signal will convert? Right down the steps with block diagram. Write a short note on AGP. Discuss RGB in brief with Venn diagram. Define Gamut.
 3 + 3 + 4 + 4 + 1
- 10. What is Grey scale ? Write down the working principle of Scanner and Laser printer. Describe incremental line drawing algorithm. How many no. frames will be required to represent 3.5 hrs. of QCIF video ? 1 + 7 + 5 + 2
- 11. A document contains letters *A* through *F* with frequencies as indicated:

 $A: 0.25 \quad B: 0.1 \quad C: 0.2 \quad D: 0.15 \quad E: 0.26 \quad F: 0.04$

Use Huffman coding to derive a codeword set. Describe Huffman coding. What are the differences between MPEG-1 and MPEG-2 standard? What is H.261? How is it different from H.263? 4+4+3+2+2

- 12. Write short notes on any *three* of the following : 3×5
 - a) Multimedia Database
 - b) Global histogram approach
 - c) LHA
 - d) TFT vs LCD
 - e) PDP.

30011 (M.Tech)